## **WEST Search History**

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DATE: Wednesday, August 04, 2004

Hide?	Set Nam	e Query Hit C	<u>ount</u>
	DB=PG	GPB,USPT,USOC,EPAB,JPAB,DWPI; PLUR=YES; OP=AD.	J
	L3	L2 with (sequence or dna)	14
	L2	monooxygenase with (pseudomonas or bukholderia)	97
	L1	monooxygenase with (pseudomonas or bukholderia)	97

END OF SEARCH HISTORY

## **Hit List**

Clear Generate Collection Print Fwd Refs Bkwd Refs
Generate OACS

**Search Results -** Record(s) 1 through 10 of 14 returned.

1. Document ID: US 20020143105 A1

Using default format because multiple data bases are involved.

L3: Entry 1 of 14

File: PGPB

Oct 3, 2002

PGPUB-DOCUMENT-NUMBER: 20020143105

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20020143105 A1

TITLE: Discordant helix stabilization for prevention of amyloid formation

PUBLICATION-DATE: October 3, 2002

INVENTOR-INFORMATION:

NAME

CITY

STATE

COUNTRY

RULE-47

Johansson, Jan

Stockholm

SE

US-CL-CURRENT: <u>525/54.1</u>

Full Title Citation	Front	Review	Classification	Date	Reference	Sequences		Claims	KNINC	Отама Ов
										. ,
***************************************		*************	************************	*********	******************************	*********************	~~~~			

2. Document ID: US 6716589 B2

L3: Entry 2 of 14

File: USPT

Apr 6, 2004

Aug 12, 2003

US-PAT-NO: 6716589

DOCUMENT-IDENTIFIER: US 6716589 B2

TITLE: Discordant helix stabilization for prevention of amyloid formation

Full Title Chation Front Review Classification Date Reference Claims KMC Draw D.

3. Document ID: US 6605430 B1

L3: Entry 3 of 14

US-PAT-NO: 6605430

DOCUMENT-IDENTIFIER: US 6605430 B1

TITLE: DNA shuffling of monooxygenase genes for production of industrial chemicals

File: USPT

h eb bgeeef eg ef be



4. Document ID: US 6551814 B1

L3: Entry 4 of 14

File: USPT

Apr 22, 2003

US-PAT-NO: 6551814

DOCUMENT-IDENTIFIER: US 6551814 B1

TITLE: Methods for bioremediation by degrading toluene

Full Title Citation Front Review Classification Date Reference Claims 1000 Brand Do

5. Document ID: US 6395539 B1

L3: Entry 5 of 14

File: USPT

May 28, 2002

US-PAT-NO: 6395539

DOCUMENT-IDENTIFIER: US 6395539 B1

TITLE: Composition and methods for bioremediation

Full Title Citation Front Review Classification Date Reference Claims KMC Draw Da

6. Document ID: US 5605823 A

L3: Entry 6 of 14

File: USPT

Feb 25, 1997

US-PAT-NO: 5605823

DOCUMENT-IDENTIFIER: US 5605823 A

TITLE: Bioconversions catalysed by the toluene monooxygenase of Pseudomonas

mendocinaKR-1

Full Title Citation Front Review Classification Date Reference Claims KMC Draw De

7. Document ID: US 5512478 A

L3: Entry 7 of 14

File: USPT

Apr 30, 1996

US-PAT-NO: 5512478

DOCUMENT-IDENTIFIER: US 5512478 A

\*\* See image for Certificate of Correction \*\*

TITLE: Genes and enzymes involved in the microbial degradation of pentachlorophenol

Full Title Citation Front Review Classification Date Reference Claims KNNC Draw De

h eb bgeeef eg ef be

8. Document ID: US 5364787 A

L3: Entry 8 of 14

File: USPT

Nov 15, 1994

US-PAT-NO: 5364787

DOCUMENT-IDENTIFIER: US 5364787 A

TITLE: Genes and enzymes involved in the microbial degradation of pentachlorophenol

Full | Title | Citation | Front | Review | Classification | Date | Reference | Claims | Claims | KMC | Draw Do 9. Document ID: US 5171684 A

L3: Entry 9 of 14

File: USPT

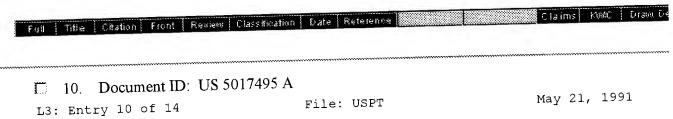
Dec 15, 1992

US-PAT-NO: 5171684

DOCUMENT-IDENTIFIER: US 5171684 A

TITLE: Bioconversions catalyzed by the toluene monooxygenase of Pseudomanas

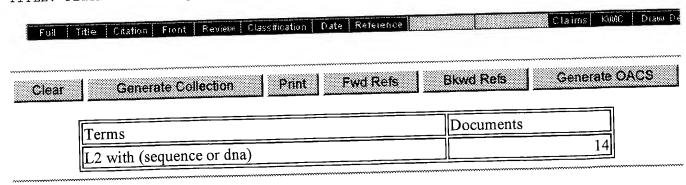
mendocina KR-1



US-PAT-NO: 5017495

DOCUMENT-IDENTIFIER: US 5017495 A

TITLE: Plasmid encoding the Pseudomonas mendocina toluene monooxygenase gene



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Go to Doc# Next Page Previous Page

## **Hit List**

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Search Results - Record(s) 11 through 14 of 14 returned.

11. Document ID: JP 10099078 A

Using default format because multiple data bases are involved.

L3: Entry 11 of 14

File: JPAB

Apr 21, 1998

PUB-NO: JP410099078A

DOCUMENT-IDENTIFIER: JP 10099078 A

TITLE: R-(-)-MANDELIC MONOOXYGENASE GENE

PUBN-DATE: April 21, 1998

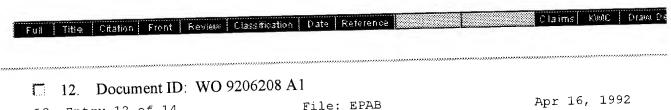
INVENTOR-INFORMATION:

NAME

COUNTRY

SHIMAO, MASAYUKI HARAYAMA, SHIGEAKI

INT-CL (IPC): C12 N 15/09; C07 H 21/04; C12 N 9/04; C12 P 41/00



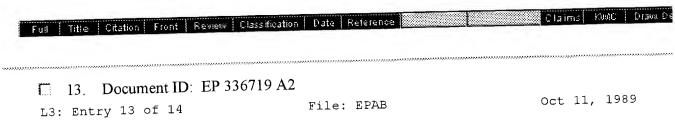
PUB-NO: WO009206208A1

L3: Entry 12 of 14

DOCUMENT-IDENTIFIER: WO 9206208 A1

TITLE: BIOCONVERSIONS CATALYZED BY THE TOLUENE MONOOXYGENASE OF PSEUDOMONAS

MENDOCINA KR-1



PUB-NO: EP000336719A2

DOCUMENT-IDENTIFIER: EP 336719 A2

TITLE: Method and materials for the microbial bioconversion of toluene and other

phenyl compounds.

Title Citation Front Review Classification Date Reference

14. Document ID: IE 83070 B, EP 336719 A, WO 8909828 A, AU 8934104 A, FI 8905788 A, NO 8904845 A, DK 8906090 A, JP 03500126 W, US 5017495 A, ZA 8902503 A, IL 89845 A, CA 1337977 C, NO 301548 B1, JP 2862301 B2, FI 104379 B1, KR 157301 B1

L3: Entry 14 of 14

File: DWPI

Oct 1, 2003

DERWENT-ACC-NO: 1989-294582

DERWENT-WEEK: 200367

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TITLE: Plasmid contg. Pseudomonas mendocina kr-1 monooxygenase genes - used to transform cells to enable bio-conversion of phenyl cpds.

			****
Clear Generate Collection Print Fwd Refs Bkwd Refs	Genera	te OACS	
Documents		$\neg$	
L2 with (sequence or dna)	1	4	

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Previous Page

Next Page

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LOGINID:SSSPTA1800EXS
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                  web Page URLs for STN Seminar Schedule - N. America "Ask CAS" for self-help around the clock
 NEWS
 NEWS
                  EXTEND option available in structure searching
          May 12
 NEWS
                  Polymer links for the POLYLINK command completed in REGISTRY
          May 12
 NEWS
                  New UPM (Update Code Maximum) field for more efficient patent
       5
          May 27
 NEWS
                  SDIs in CAplus
                  CAplus super roles and document types searchable in REGISTRY
          May 27
 NEWS
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                  Additional enzyme-catalyzed reactions added to CASREACT
          Jun 28
 NEWS
                  ANTE, AQUALINE, BIOENG, CIVILENG, ENVIROENG, MECHENG,
          Jun 28
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 NEWS
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          Jul 12
 NEWS
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                  resulting in a closer connection to BABS
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 NEWS 10
          Jul 30
                   with the 228th ACS National Meeting
                  IFIPAT/IFIUDB/IFICDB reloaded with new search and display
 NEWS 11
          AUG 02
                   fields
                  CAplus and CA patent records enhanced with European and Japan
          AUG 02
 NEWS 12
                   Patent Office Classifications
                   STN User Update to be held August 22 in conjunction with the
          AUG 02
 NEWS 13
                   228th ACS National Meeting
                  The Analysis Edition of STN Express with Discover!
 NEWS 14
          AUG 02
                   (Version 7.01 for Windows) now available
                   Pricing for the Save Answers for SciFinder Wizard within
          AUG 04
  NEWS 15
                   STN Express with Discover! will change September 1, 2004
               JULY 30 CURRENT WINDOWS VERSION IS V7.01, CURRENT
  NEWS EXPRESS
                MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP)
                AND CURRENT DISCOVER FILE IS DATED 26 APRIL 2004
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  NEWS INTER
                Welcome Banner and News Items
  NEWS LOGIN
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   result in loss of user privileges and other penalties.
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 FILE 'LIFESCI' ENTERED AT 17:05:37 ON 04 AUG 2004
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FILE 'WPIDS' ENTERED AT 17:05:37 ON 04 AUG 2004
COPYRIGHT (C) 2004 THOMSON DERWENT
=> s monooxygenase (5a)(pseudomonas or bukholderia)
           1266 MONOOXYGENASE (5A) (PSEUDOMONAS OR BUKHOLDERIA)
L1
=> s l1 (5a)(sequence or gene)
   6 FILES SEARCHED..
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=> s 12 and (aromatic or toluene)
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      Cyclodextrin for enhanced microbial oxidation using xylene
 ΤI
      monooxygenase-producing microorganism
      Maruyama, Takahiro; Iida, Hiroshi; Kakitani, Hitoshi
 TN
      Tosoh Corp., Japan
 PA
      Jpn. Kokai Tokkyo Koho, 13 pp.
 SO
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                                                                         20020610
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 L5
      2004:337190 HCAPLUS
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      141:35369
 DN
                                ***toluene*** /o-xylene monooxygenase from
      Phenol hydroxylase and
 TI
      Pseudomonas stutzeri OX1: interplay between two enzymes
      Cafaro, Valeria; Izzo, Viviana; Scognamiglio, Roberta; Notomista, Eugenio; Capasso, Paola; Casbarra, Annarita; Pucci, Piero; Di Donato, Alberto Dipartimento di Chimica Biologica, Universita di Napoli Federico II,
 ΑU
 CS
      Naples, 16-80134, Italy
      Applied and Environmental Microbiology (2004), 70(4), 2211-2219
 50
```

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CODEN: AEMIDF; ISSN: 0099-2240
      American Society for Microbiology
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Ŀ5
      2004310948
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      PubMed ID: 15213740
A survey of indigenous microbial hydrocarbon degradation genes in soils
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TT
      from Antarctica and Brazil.
      Luz A P; Pellizari V H; Whyte L G; Greer C W
      Canadian journal of microbiology, (2004 May) 50 (5) 323-33. Journal code: 0372707. ISSN: 0008-4166.
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      2003022707
                        MEDLINE
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DN
      Use of the two-liquid phase concept to exploit kinetically controlled
TI
      multistep biocatalysis.
      Buhler Bruno; Bollhalder Irene; Hauer Bernhard; Witholt Bernard; Schmid
ΑU
      Andreas
      Institute of Biotechnology, Swiss Federal Institute of Technology Zurich,
CS
      CH-8093 Zurich, Switzerland.
      Biotechnology and bioengineering, (2003 Mar 20) 81 (6) 683-94. Journal code: 7502021. ISSN: 0006-3592.
50
      United States
CY
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LA
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      Cross-regulation between a novel two-component signal transduction system for catabolism of ***toluene*** in Pseudomonas mendocina and the TodST
ΤI
      system from Pseudomonas putida.
      Rámos-Gonzalez Maria-Isabel; Olson Monica; Gatenby Anthony A; Mosqueda
ΑU
      Gilberto; Manzanera Maximino; Campos Maria J; Vichez Susana; Ramos Juan L
Department of Biochemistry and Molecular and Cellular Biology of Plants,
Estacion Experimental del Zaidin, Consejo Superior de Investigaciones
CS
      Cientificas, 18008 Granada, Spain.. maribel.ramos@eez.csic.es
Journal of bacteriology, (2002 Dec) 184 (24) 7062-7.
Journal code: 2985120R. ISSN: 0021-9193.
S0
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        Cloning and characterization of a FAD-monooxygenase gene (cadA) involved indegradation of chloranilic acid (2,5-dichloro-3,6-dihydroxybenzo-1,4-
ΤI
        quinone) in Pseudomonas putida TQ07;
            Pseudomonas putida mutant enzyme gene expression profiling in
                                                           compound degradation and
                                      ***aromatic***
            Escherichia coli for
            chloroaromatic compound degardation for waste-water treatment and soil
            decontamination
        TREVINO-QUINTANILLA LG; GALAN-WONG LJ; RODRIGUEZ-URIBE B; SOBERON-CHAVEZ
ΑU
```

```
Univ Nacl Autonoma Mexico; Univ Autonoma Nuevo Leon; Univ Autonoma Nuevo
CS
      Soberon-Chavez G, Univ Nacl Autonoma Mexico, Inst Biotechnol, Dept Mol Microbiol, Postal 510-3, Cuernavaca 62251, Morelos, Mexico
LO
      APPLIED MICROBIOLOGY AND BIOTECHNOLOGY; (2002) 59, 4-5, 545-550
SO
      0175-7598
      Journal
DT
      English
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     ANSWER 7 OF 60 HCAPLUS COPYRIGHT 2004 ACS on STN
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     2002:783519 HCAPLUS
ΑN
DN
     138:94987
     Oxygenase systems in an oligotrophic bacterial community of a subsurface
TI
     water polluted by BTEX
     Cavalca, L.; Dell'Amico, E.; Andreoni, V.
ΑU
     Dipartimento di Scienze e Tecnologie Alimentari e Microbiologiche,
CS
     Universita degli Studi, Milan, 20133, Italy
Developments in Soil Science (2002), 28B(Soil Mineral-Organic
50
     Matter-Microorganism Interactions and Ecosystem Health), 363-375
     CODEN: DSSCDM; ISSN: 0166-0918
     Elsevier Science B.V.
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     2002:608217
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     PREV200200608217
DN
     Cloning and sequencing of the soluble butane monooxygenase from
TI
     Pseudomonas butanovora.
     Sluis, M. K. [Reprint author]; Sayavedra-Soto, L. A. [Reprint author];
ΑU
     Arp, D. J. [Reprint author]
     Oregon State University, Corvallis, OR, USA
Abstracts of the General Meeting of the American Society for Microbiology,
CS
SO
     (2002) Vol. 102, pp. 282. print.
     Meeting Info.: 102nd General Meeting of the American Society for
     Microbiology. Salt Lake City, UT, USA. May 19-23, 2002. American Society
     for Microbiology.
     ISSN: 1060-2011.
     Conference; (Meeting)
Conference; Abstract; (Meeting Abstract)
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     Last Updated on STN: 27 Nov 2002
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      2002-14446 BIOTECHDS
AN
      Cloning and sequencing of a phenol hydroxylase gene of Pseudomonas
ΤI
      pseudoalcaligenes strain MH1 - A bacterium able to mineralize various
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                            compounds;
          vector-mediated gene transfer and expression in host cell for phenol
          degradation, strain improvement and waste-water treatment
      ZOUARI H; MOUKHA S; LABAT M; SAYADI S
Univ Aix Marseille 1; CBS; Univ Aix Marseille 1
Labat M, Univ Aix Marseille 1, IFR BAIM, ESIL, Inst Rech Dev, CP 925,163
ΑU
CS
LO
      Ave Luminy, F-13288 Marseille 9, France
      APPLIED BIOCHEMISTRY AND BIOTECHNOLOGY; (2002) 102, , 261-276
                                                                                ISSN:
SO
      0273-2289
      Journal
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LA
      English
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L5
     2002:219602 HCAPLUS
ΑN
     137:164407
DN
     Characterization of tdt genes for the degradation of tricyclic diterpenes
TI
     by Pseudomonas diterpeniphila A19-6a
     Morgan, C. A.; Wyndham, R. C
ΑU
     Ottawa Carleton Institute of Biology, College of Natural Sciences, Carleton University, Ottawa, ON, K1S 5B6, Can.
CS
     Canadian Journal of Microbiology (2002), 48(1), 49-59
SO
     CODEN: CJMIAZ; ISSN: 0008-4166
     National Research Council of Canada
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      ANSWER 11 OF 60 HCAPLUS COPYRIGHT 2004 ACS ON STN
      2001:348236 HCAPLUS
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      4-Hydroxyacetophenone monooxygenase from Pseudomonas fluorescens ACB. A
TI
      novel flavoprotein catalyzing Baeyer-Villiger oxidation of
        ***aromatic***
                           compounds
      Kamerbeek, Nanne M.; Moonen, Marielle J. H.; Van der Ven, Jos G. M.; Van
ΑU
      Berkel, Willem J. H.; Fraaije, Marco W.; Janssen, Dick B.
      Laboratory of Biochemistry, Groningen Biomolecular Sciences and
CS
      Biotechnology Institute, University of Groningen, Groningen, 9747 AG,
50
      European Journal of Biochemistry (2001), 268(9), 2547-2557
      CODEN: EJBCAI; ISSN: 0014-2956
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RE.CNT 49
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      2000:861775 HCAPLUS
ΑN
DN
     134:38863
     Preparation of enantio-specific epoxides using wild-type and mutant
ΤI
        ***toluene*** monooxygenases
      Steffan, Robert J.; McClay, Kevin R.
IN
     Envirogen, Inc., USA PCT Int. Appl., 70 pp.
PA
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     2000:286306 SCISEARCH
AN
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     Xylene monooxygenase catalyzes the multistep oxygenation of ***toluene*** and pseudocumene to corresponding alcohols
ΤI
                          and pseudocumene to corresponding alcohols, aldehydes, and
     acids in Escherichia coli JM101
ΑU
     Buhler B; Schmid A (Reprint); Hauer B; Witholt B
     ETH ZURICH, INST BIOTECHNOL, ETH HONGGERBERG, CH-8093 ZURICH, SWITZERLAND
CS
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     GERMANY
CYA
     SWITZERLAND; GERMANY
     JOURNAL OF BIOLOGICAL CHEMISTRY, (7 APR 2000) Vol. 275, No. 14, pp.
SO
     10085-10092.
     Publisher: AMER SOC BIOCHEMISTRY MOLECULAR BIOLOGY INC, 9650 ROCKVILLE
     PIKE, BETHESDA, MD 20814.
     ISSN: 0021-9258.
     Article; Journal
DT
     LIFE
FS
     English
LA
REC
     Reference Count: 42
     *ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS*
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L5
     ANSWER 14 OF 60 HCAPLUS COPYRIGHT 2004 ACS ON STN
     2000:836307 HCAPLUS
AN
DN
     134:162870
ŢI
     Bioconversion of substituted styrenes to the corresponding
     enantiomerically pure epoxides by a recombinant Escherichia coli strain
     Bernasconi, S.; Orsini, F.; Sello, G.; Colmegna, A.; Galli, E.; Bestetti.
ΑU
     Dipartimento di Chimica Organica e Industriale, Universita' degli Studi di
CS
     Milano, Milan, 20133, Italy
Tetrahedron Letters (2000), 41(47), 9157-9161
SO
     CODEN: TELEAY; ISSN: 0040-4039
PB
     Elsevier Science Ltd.
     Journal
DT
     English
LA
     CASREACT 134:162870
os
               THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE.CNT 8
               ALL CITATIONS AVAILABLE IN THE RE FORMAT
L5
     ANSWER 15 OF 60
                          MEDLINE on STN
                                                            DUPLICATE 6
ΑN
     1999402750
                     MEDLINE
     PubMed ID: 10473416
DN
     Identification of the
                               ***Pseudomonas***
                                                    stutzeri OX1
                                                                    ***toluene***
ΤI
                  ***monooxygenase***
                                                       ***gene***
                                         regulatory
                                                                     (touR) and of
     its cognate promoter.
     Arenghi F L; Pinti M; Galli E; Barbieri P
ΑU
     Dipartimento di Genetica e di Biologia dei Microrganismi, Universita degli
CS
     Studi di Milano, 20133 Milan, Italy.
     Applied and environmental microbiology, (1999 Sep) 65 (9) 4057-63.
SO
     Journal code: 7605801. ISSN: 0099-2240.
     United States
CY
     Journal; Article; (JOURNAL ARTICLE)
DT
     English
LA
FS
     Priority Journals
     GENBANK-AJ005663
05
EM
     199912
     Entered STN: 20000113
ED
     Last Updated on STN: 20000113
     Entered Medline: 19991223
L5
     ANSWER 16 OF 60 SCISEARCH COPYRIGHT 2004 THOMSON ISI ON STN DUPLICATE 7
ΑN
     1999:498769 SCISEARCH
     The Genuine Article (R) Number: 209BK
Genetic organization of sulphur-controlled aryl desulphonation in
GΑ
TI
     Pseudomonas putida S-313
     Vermeij P; Wietek C; Kahnert A; Wuest T; Kertesz M A (Reprint)
ΑU
CS
     SWISS FED INST TECHNOL, ETH ZENTRUM, INST MIKROBIOL, LFV, CH-8092 ZURICH,
     SWITZERLAND (Reprint); SWISS FED INST TECHNOL, ETH ZENTRUM, INST
     MIKROBIOL, LFV, CH-8092 ZURICH, SWITZERLAND
CYA
     SWITZERLAND
     MOLECULAR MICROBIOLOGY, (JUN 1999) Vol. 32, No. 5, pp. 913-926.
SO
     Publisher: BLACKWELL SCIENCE LTD, P O BOX 88, OSNEY MEAD, OXFORD OX2 ONE,
     OXON, ENGLAND. ISSN: 0950-382X.
DT
     Article; Journal
FS
     LIFE
LA
     English
REC
     Reference Count: 52
     *ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS*
L5
      ANSWER 17 OF 60 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI ON STN
      2000-05721 BIOTECHDS
AN
TI
      Biotransformation of phenol to catechol by recombinant
      phenol-hydroxylase;
      recombinant expression of phenol-2-monooxygenase in Escherichia coli
Rodriguez M J; Lebrero J L A; *Alvarez E
ΑU
      Appl.Genet.Immunol.Madrid
CS
LO
      SmithKline Beecham, Centro de Investigacion Basica, Santiago Grisolia, 4,
      Parque Tecnologico de Madrid, 28760 Tres Cantos, Madrid, Spain.
      Email: emilio.alvarez@sb.com
SO
      Biocatalysis Biotransform.; (1999) 17, 1, 45-60
                        ISSN: 1024-2422
      CODEN: BOBOEQ
      Journal
DT
      English
LA
L5
      ANSWER 18 OF 60 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN
      1999-03024 BIOTECHDS
AN
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TI
      Production of para-hydroxybenzoate;
         stereospecific hydroxybenzoic acid production via vector-mediated

***toluene*** - ***monooxygenase*** ***gene*** transfer
          expression in ***Pseudomonas***
                                               sp. for polyester and paraben
          preservative production
      Grelak R L; Chen K K
ΑU
      Du-Pont
PA
      Wilmington, DE, USA.
WO 9856920 17 Dec 1998
Ľ0
PΙ
      WO 1998-US12072 11 Jun 1998
ΑI
PRAI
      US 1997-49556 13 Jun 1997
      Patent
DT
      English
LA
      WPĬ: 1999-060332 [05]
os
L5
     ANSWER 19 OF 60
                                                           DUPLICATE 8
                          MEDLINE on STN
AN
     1998432776
                     MEDLINE
     PubMed ID: 9758777
DN
     Analysis of the
                       ***gene***
                                                          ***toluene***
                                      cluster encoding
TI
                                                                          /o-xylene
       ***monooxygenase*** from
                                      ***Pseudomonas***
                                                           stutzeri OX1.
     Bertoni G; Martino M; Galli E; Barbieri P
AU
     Dipartimento di Genetica e di Biologia dei Microrganismi, Universita degli
CS
     Studi di Milano, 20133 Milan, Italy.
     Applied and environmental microbiology, (1998 Oct) 64 (10) 3626-32.
SO
     Journal code: 7605801. ISSN: 0099-2240.
     United States
CY
DT
     Journal; Article; (JOURNAL ARTICLE)
LA
     English
FS
     Priority Journals
05
     GENBANK-AJ005663
EΜ
     199811
     Entered STN: 19990106
ED
     Last Updated on STN: 20000303
     Entered Medline: 19981124
L5
      ANSWER 20 OF 60 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI ON STN
      1998-02434 BIOTECHDS
ΑN
ΤI
      Rhizoremediation of trichloroethylene by a recombinant, root-colonizing
                                                   ***toluene***
      Pseudomonas fluorescens strain expressing
      -ortho-monooxygenase constitutively;
         trichloroethylene degradation and soil decontamination
      Yee D C; Maynard J A; *Wood T K Univ.California
ΑU
CS
      Department of Chemical and Biochemical Engineering, University of
LO
      California, Irvine, CA 92697-2575, USA.
      Email: tkwood@uci.edu
SO
      Appl.Environ.Microbiol.; (1998) 64, 1, 112-18
      CODEN: AEMIDF
                        ISSN: 0099-2240
DT
      Journal
      English
LA
=> d 21-30
     ANSWER 21 OF 60 HCAPLUS COPYRIGHT 2004 ACS on STN
L5
     1997:652504 HCAPLUS
AN
     127:328139
DN
     Purification and characterization of 2-hydroxybiphenyl 3-monooxygenase, a
TI
                                              ***aromatic***
     novel NADH-dependent, FAD-containing
                                                               hydroxylase from
     Pseudomonas azelaica HBP1
ΑU
     Suske, Winfried_A.; Held, Martin; Schmid, Andreas; Fleischmann, Thomas;
     Wubbolts, Marcel G.; Kohler, Hans-Peter E.
CS
     Department of Microbiology, Swiss Federal Institute of Environmental
     Sciences and Technology, Dubendorf, CH-8600, Switz.
     Journal of Biological Chemistry (1997), 272(39), 24257-24265
SO
     CODEN: JBCHA3; ISSN: 0021-9258
     American Society for Biochemistry and Molecular Biology
PB
DT
     Journal
     English
LA
      ANSWER 22 OF 60 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN
L5
      1997-10600 BIOTECHDS
AN
                                            ***aromatic***
      Changes in the regiospecificity of
                                                               hydroxylation
ΤI
                                                                    ***toluene***
      produced by active site engineering in the diiron enzyme
      -4-monooxygenase;
         Pseudomonas mendocina ***toluene***
                                                   degradation enzyme engineering
```

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by site-directed mutagenesis
ΑU
       Pikus J D; Studts J M; McClay K; Steffan R J; *Fox B G
       Univ.Wisconsin-Madison-Inst.Enzyme-Res.; Envirogen
CS
       Institute for Enzyme Research, Graduate School and Department of Biochemistry, College of Agricultural and Life Sciences, University of Wisconsin, Madison, WI 53705, USA.
Email: fox@enzyme.wisc.edu
LO
50
       Biochemistry; (1997) 36, 31, 9283-89
       CODEN: BICHAW
                          ISSN: 0006-2960
DT
       Journal
       English
LA
      ANSWER 23 OF 60 HCAPLUS COPYRIGHT 2004 ACS ON STN
L5
      1998:26853
                   HCAPLUS
AN
      128:207961
DN
      Evidence for the evolution of a single component phenol/cresol hydroxylase
TI
                                ***toluene***
      from a multicomponent
                                                  monooxygenase
      Olsen, R. H.; Kukor, J. J.; Byrne, A. M.; Johnson, G. R.
ΑU
      Department of Microbiology and Immunology, University of Michigan Medical
CS
      School, Ann Arbor, MI, 48109-0620, USA
SO
      Journal of Industrial Microbiology & Biotechnology (1997), 19(5/6),
      CODEN: JIMBFL; ISSN: 1367-5435
      Stockton Press
PB
DT
      Journal
LA
      English
RE.CNT 32
                THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS RECORD
                ALL CITATIONS AVAILABLE IN THE RE FORMAT
L5
       ANSWER 24 OF 60 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN
       1998-01969 BIOTECHDS
AN
       Biosensors for TCE based on TCE-induced expression of
TI
                                                                      ***toluene***
       -4-monooxygenase from P. mendocina KR1;
          trichloroethylene analysis using a recombinant Pseudomonas mendocina
          microbial electrode (conference abstract)
ΑU
      McClay K; Steffan R J
CS
       Envirogen
LO
       Envirogen, Inc., Lawrenceville, NJ 08648, USA.
SO
       Abstr.Gen.Meet.Am.Soc.Microbiol.; (1997) 97 Meet., 348
       CODEN: 0005P
                         ISSN: 0067-2777
       American Society for Microbiology, 97th General Meeting, Miami Beach, FL,
       4-8 May, 1997.
DT
       Journal
      English
LA
L5
     ANSWER 25 OF 60 HCAPLUS COPYRIGHT 2004 ACS on STN
ΑN
     1996:270738 HCAPLUS
     124:311959
Cloning and characterization of ***genes*** er
from ***Pseudomonas***
DN
     124:311959
TI
                                                                        ***toluene***
                                                            encoding
                                                                sp. strain JS150
      (bioremediation, Burkholderia pickettii)
     Johnson, Glenn Ronald
Univ. of Michigan, Ann Arbor, MI, USA
(1996) 171 pp. Avail.: Univ. Microfilms Int., Order No. DA9610153
ΑU
CS
SO
     From: Diss. Abstr. Int., B 1996, 56(12), 6541
DT
     Dissertation
     English
LA
L5
      ANSWER 26 OF 60 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN
      DUPLICATE 9
      1996-12647
                   BIOTECHDS
ΑN
TI
      Microorganisms transformed with a gene from a Pseudomonas cepacia mutant;
               ***toluene*** -monooxygenase gene expression in e.g. Escherichia
          coli for use in chlorinated hydrocarbon degradation and ***aromatic*** hydrocarbon degradation for groundwa
                              hydrocarbon degradation for groundwater
          decontamination, etc.
      Shields M S; Francesconi S C
ΑU
      Shields M S; Francesconi S C
PA
      Gulf Breeze, FL, USA.; Pensacola, FL, USA.
LO
PΙ
      US 5543317 6 Aug 1996
      US 1994-319387 6 Oct 1994
ΑI
      US 1994-319387 6 Oct 1994
PRAI
      Patent
DT
LA
      English
0$
      WPI: 1996-370640 [37]
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L5
       ANSWER 27 OF 60 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI ON STN
       DUPLICATE 10
       1997-02351 BIOTECHDS
AN
T,I
       Gene organization and low regiospecificity in
                                                           ***aromatic*** -ring
       hydroxylation of a benzene-monooxygenase of Pseudomonas aeruginosa J1104;
          benzene degradation
      Kitayama A; Suzuki E; Kawakami Y; Nagamune T
ΑU
      Univ.Tokyo
C$
      Department of Chemistry and Biotechnology, Graduate School of
LO
       Engineering, The University of Tokyo, 7-3-1 Hongo, Bunkyo-ku, Tokyo 113. J. Ferment. Bioeng.; (1996) 82, 5, 421-25
SO
       CODEN: JFBIEX
                         ISSN: 0922~338X
       Journal
DT
      English
LA
      ANSWER 28 OF 60 HCAPLUS COPYRIGHT 2004 ACS on STN 1996:218001 HCAPLUS
L5
AN
      Development of molecular methods for detecting toluenedegrading bacteria
TI
      at a contaminated site.
      Harris, Kelley S.; Herrick, Jim B.; Brainard, Jim R.
ΑU
      Department Chemistry, Fort Lewis College, Durango, CO, 81301, USA
CS
      Book of Abstracts, 211th ACS National Meeting, New Orleans, LA, March
S0
      24-28 (1996), CHED-155 Publisher: American Chemical Society, Washington,
      CODEN: 62PIAJ
      Conference; Meeting Abstract
DT
LA
      English
L5
      ANSWER 29 OF 60 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN
      1996-09087 BIOTECHDS
Development of molecular methods for detecting
ΑN
                                                             ***toluene***
TI
      -degrading bacteria at a contaminated site;
          bacterium isolation for
                                      ***toluene***
                                                        degradation by polymerase
          chain reaction using DNA primer (conference abstract)
ΑU
      Harris K S; Herrick J B; Brainard J R
      Fort-Lewis-Coll.; Los-Alamos-Nat.Lab.
CS
      Department of Chemistry, Fort Lewis College, Durango, CO 81301, USA. Abstr.Pap.Am.Chem.Soc.; (1996) 211 Meet., Pt.1, CHED155 CODEN: ACSRAL ISSN: 0065-7727
LO
S0
      211th ACS National Meeting, New Orleans, LA, 24-28 March, 1996.
DT
      Journal
      English
LA
     ANSWER 30 OF 60
L5
                           MEDLINE on STN
                                                              DUPLICATE 11
ΑN
     96035667
                   MEDLINE
     PubMed ID: 7574644
DN
                                           ***genes***
     Nucleotide sequence analysis of
                                                                         ***toluene***
TI
                                                          encoding a
     /benzene-2- ***monooxygenase***
                                           from
                                                   ***Pseudomonas***
                                                                          sp. strain
     JS150.
ΑU
     Johnson G R; Olsen R H
     Department of Microbiology and Immunology, University of Michigan Medical
CS
     School, Ann Arbor 48109-0620, USA.
     ES-04911 (NIEHS)
MO1RR00042 (NCRR)
Applied and environmental microbiology, (1995 Sep) 61 (9) 3336-46.
NC
S0
     Journal code: 7605801. ISSN: 0099-2240.
CY
     United States
     Journal; Article; (JOURNAL ARTICLE)
DT
LA
     English
FS
     Priority Journals
     GENBANK-L40033
OS
     199511
EΜ
ED
     Entered STN: 19951227
     Last Updated on STN: 19951227
     Entered Medline: 19951114
=> d 31-40
L<sub>5</sub>
     ANSWER 31 OF 60
                           MEDLINE on STN
                                                             DUPLICATE 12
     96031586
                   MEDLINE
AN
     PubMed ID: 7574612
DN
     Isolation and characterization of RNA from low-biomass deep-subsurface
TI
     sediments.
     ogram A; Sun W; Brockman F J; Fredrickson J K
ΑU
     Department of Crop and Soil Sciences, Washington State University, Pullman
CS
```

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99164-6420, USA.
S0
      Applied and environmental microbiology, (1995 Feb) 61 (2) 763-8.
      Journal code: 7605801. ISSN: 0099-2240.
CY
      United States
      Journal; Article; (JOURNAL ARTICLE)
DT
      English
LA
      Priority Journals
FS
      199511
ΕM
      Entered STN: 19951227
ED
      Last Updated on STN: 19990129
      Entered Medline: 19951106
L5
       ANSWER 32 OF 60 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN
       1996-07268 BIOTECHDS
ΑN
       Nucleotide sequence, organization and regulation of the ***tolue ortho-monooxygenase (Tom) operon of Pseudomonas cepacia G4 and its
TI
                                                                       ***toluene***
       constitutive variants;
          and application in e.g. phenol degradation, chloroethene degradation,
          etc. (conference abstract)
       Francesconi S C; Blake A C; Shields M S
ΑU
       EPA; Univ.West-Florida
CS
LO
       The National Research Council, US EPA, Gulf Breeze, FL 32561, USA.
SO
       Abstr.Gen.Meet.Am.Soc.Microbiol.; (1995) 95, Meet., 570
                          ISSN: 0067-2777
       CODEN: 0005P
       American Society for Microbiology, 95th General Meeting, Washington, DC.
       21-25 May, 1995.
DT
       Journal
LA
       English
L5
      ANSWER 33 OF 60
                            MEDLINE on STN
                                                              DUPLICATE 13
                    MEDLINE
ΑN
      95172404
      PubMed ID: 7867951
DN
                                   ***gene***
TI
      Sequence analysis of the
                                                  cluster encoding
                                                                       ***toluene***
                                           ***Pseudomonas***
          ***monooxygenase***
                                   from
                                                                  pickettii PKO1.
ΑU
      Byrne A M; Kukor J J; Olsen R H
     Department of Microbiology and Immunology, University of Michigan Medical
CS
      School, Ann Arbor 48109-0620, USA.
     ES-04911 (NIEHS)

M01RR00042 (NCRR)

Gene, (1995 Feb 27) 154 (1) 65-70.

Journal code: 7706761. ISSN: 0378-1119.
NC
SO
CY
     Netherlands
DT
     Journal; Article; (JOURNAL ARTICLE)
     English
LA
FS
     Priority Journals
os
     GENBANK-U04052
     199503
EΜ
     Entered STN: 19950407
ED
     Last Updated on STN: 19960424
     Entered Medline: 19950328
L5
     ANSWER 34 OF 60 HCAPLUS COPYRIGHT 2004 ACS on STN
     1994:453667 HCAPLUS
AN
DN
     121:53667
                ***toluene*** -3-monooxygenase pathway cloned from Pseudomonas
TI
     A novel
ΑU
     Olsen, Ronald H.; Kukor, Jerome J.; Kaphammer, Bryan
CS
     Dep. Microbiol. and Immunology, Univ. Michigan Med. Sch., Ann Arbor, MI,
     48109-0620, USA
SO
     Journal of Bacteriology (1994), 176(12), 3749-56
     CODEN: JOBAAY; ISSN: 0021-9193
DT
     Journal
LA
     English
L5
     ANSWER 35 OF 60 HCAPLUS COPYRIGHT 2004 ACS on STN
AN
     1994:402106 HCAPLUS
DN
     121:2106
     Metabolism of polyhalogenated compounds by a genetically engineered
TI
     Wackett, Lawrence P.; Sadowsky, Michael J.; Newman, Lisa M.; Hur, Hor-Gil;
     Li, Shuying
     Dep. Biochem., Univ. Minnesota, St Paul, MN, 55108, USA
Nature (London, United Kingdom) (1994), 368(6472), 627-9
CS
SO
     CODEN: NATUAS; ISSN: 0028-0836
DT
     Journal
     English
LA
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L5
       ANSWER 36 OF 60 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN
       DUPLICATE 14
       1994-10751 BIOTECHDS
ΑN
       Nucleotide sequence analysis of the positive regulatory tbuT for the ***toluene*** -3- ***monooxygenase***
TI
                                                                     ***aene***
                                                                    operon from
         ***Pseudomonas***
                              pickettii PKO1;
              ***toluene*** -monooxygenase characterization and DNA sequence ysis for ***toluene*** degradation and benzene degradation
          analysis for
          (conference abstract)
ΑU
       Byrne A M; Olsen R H
       Univ Michigan
CS
       University of Michigan Medical School, Ann Arbor, MI 48109-0620, USA.
LO
       Abstr.Gen.Meet.Am.Soc.Microbiol.; (1994) 94 Meet., 307
SO
       CODEN: 0005P
DT
       Journal
       English
LA
L5
       ANSWER 37 OF 60 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN
       1994-10752 BIOTECHDS
AN
                                     ***toluene*** -monooxygenase pathway from
TI
       Organization of the duplex
       Pseudomonas sp. JS150;
***toluene***
                             -monooxygenase and benzene-monooxygenase gene cloning
          using plasmid pRO2016 for benzene degradation (conference abstract)
ΑU
       Johnson G R; Olsen R H
CS
      Univ.Michigan
      University of Michigan Medical School, Ann Arbor, MI 48109-0620, USA.
LO
50
      Abstr.Gen.Meet.Am.Soc.Microbiol.; (1994) 94 Meet., 307
      CODEN: 0005P
DT
      Journal
      English
LA
L5
      ANSWER 38 OF 60 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN
ΑN
      1994-10748 BIOTECHDS
TI
      Comparison of trichloroethylene degradation by
                                                         ***toluene***
      -oxidizing bacteria;
              ***toluene***
                             -monooxygenase expression in Pseudomonas cepacia,
          Pseudomonas pickettii and Pseudomonas mendocina (conference abstract)
ΑU
      Leahy J G; Olsen R H
CS
      Univ.Michigan
      University of Michigan Medical School, Ann Arbor, MI 48109-0620, USA.
LO
S0
      Abstr.Gen.Meet.Am.Soc.Microbiol.; (1994) 94 Meet., 306
      CODEN: 0005P
DT
      Journal
LA
      English
L5
      ANSWER 39 OF 60 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN
ΑN
      1993-14796 BIOTECHDS
ΤI
      A two-plasmid system for the isolation and detection of genes that direct
      the population of catechol from ***aromatic***
                                                            substrates;
         plasmid pCDO5 and plasmid pUCLV1 construction for Pseudomonas cepacia
           ***toluene*** -ortho-monooxygenase cloning, catechol detection and
         trichloroethylene degradation (conference abstract)
ΑU
      Somerville C C; Reagin M; Shields M S
CS
      Tech.Res.
L0
      Technical Resources Inc., 1 Sabine Island Drive. Gulf Breeze. FL
      32561-3999, USA.
S0
      Abstr.Gen.Meet.Am.Soc.Microbiol.; (1993) 93 Meet., 400
      CODEN: 0005P
DT
      Journal
      English
LA
      ANSWER 40 OF 60 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN
L5
      1993-13697 BIOTECHDS
ΑN
                                                 ***toluene*** -monooxygenase
      In vitro construction of constitutive
TI
      (TMO) mutants of Pseudomonas mendocina KR1;
         potential trichloroethylene degradation for bioremediation (conference
         paper)
      Tugusheva M; Steffan R J
ΑU
CS
LO
      Envirogen, Inc., Lawrenceville, NJ, USA.
      Abstr.Gen.Meet.Am.Soc.Microbiol.; (1993) 93 Meet., 276
SO
      CODEN: 0005P
DT
      Journal
      English
LA
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ANSWER 41 OF 60 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN
L5
       1993-13668 BIOTECHDS
ΑN
       Sequence analysis of the BTEX-degradative tbuABC operon of Pseudomonas pickettii PKO1 functional under limited oxygen conditions;
TI
           plasmid pRO1957 tbuABC operon DNA sequence analysis, characterization;
***toluene*** degradation and benzene degradation (conference page
                               degradation and benzene degradation (conference paper)
       Byrne A M; Kukor J J; Olsen R H
ΑU
       University of Michigan Medical School, Ann Arbor, Michigan, USA
10
       Abstr.Gen.Meet.Am.Soc.Microbiol.; (1993) 93 Meet., 274
S0
       CODEN: 0005P
DT
       Journal
       English
LA
L<sub>5</sub>
       ANSWER 42 OF 60 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI ON STN
       DUPLICATE 15
       1992-09962 BIOTECHDS
AN
              ***toluene*** -monooxygenase gene sequence;
TI
           Pseudomonas mendocina tmoABCDEF gene cloning and expression for use in
          p-hydroxyphenylacetic acid or indigo preparation, or trichloroethylene
          degradation
PA
       Amgen
PΙ
       WO 9206208 16 Apr 1992
ΑI
       WO 1991-US5963 21 Aug 1991
       US 1990-590374 28 Sep 1990
PRAI
DT
       Patent
       English
LA
       WPI: 1992-150892 [18]
os
L5
       ANSWER 43 OF 60 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI ON STN
       DUPLICATE 16
       1992-09337 BIOTECHDS
AN
TI
       Microbial hydroxylation of methyl group in
                                                          ***aromatic***
       heterocycle(s);
          using Escherichia coli or Pseudomonas putida cells carrying a plasmid
          containing a ***Pseudomonas*** sp. TOL plasmid xylene-
             ***monooxygenase***
                                        ***aene***
PA
       Lonza
       EP 477828 1 Apr 1992
PΙ
       EP 1991-116165 23 Sep 1991
ΑI
PRAI
       CH 1990-3066 24 Sep 1990
DT
       Patent
LA
       German
os
       WPI: 1992-133493 [17]
L5
      ANSWER 44 OF 60 HCAPLUS COPYRIGHT 2004 ACS on STN
      1993:489909 HCAPLUS
AN
      119:89909
DN
      Identification of a new gene, tmoF, in the Pseudomonas mendocina KR1 gene cluster encoding _***toluene*** -4-monooxygenase
TI
AU
      Yen, Kwang Mu; Karl, Michael R.
     Amgen Cent., Amgen Inc., Thousand Oaks, CA, 91320-1789, USA Journal of Bacteriology (1992), 174(22), 7253-61
CS
SO
      CODEN: JOBAAY; ISSN: 0021-9193
DT
      Journal
      English
LA
L5
     ANSWER 45 OF 60 HCAPLUS COPYRIGHT 2004 ACS on STN
ΑN
      1993:403853 HCAPLUS
DN
      119:3853
     Novel aerobic 2-aminobenzoate metabolism. Nucleotide sequence of the
TI
     plasmid carrying the gene for the flavoprotien 2-aminobenzoyl-COA
     monooxygenase/reductase in a denitrifying Pseudomonas sp
     Altenschmidt, Uwe; Bokranz, Martin; Fuchs, Georg
Abt. Angew. Mikrobiol., Univ. Ulm, Ulm, W-7900, Germany
ΑU
CS
     European Journal of Biochemistry (1992), 207(2), 715-22
SO
     CODEN: EJBCAI; ISSN: 0014-2956
DT
      Journal
     English
LA
15
       ANSWER 46 OF 60 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN
       1992-02979 BIOTECHDS
ΑN
       Nitroaromatics are substrates for the TOL plasmid upper-pathway enzymes;
ΤI
```

characterization of nitroaromatic degradation by Pseudomonas putida.

```
Escherichia coli expressing recombinant
                                                      ***toluene***
          -monooxygenase
      Delgado A; Wubbolts M G; Abril M A; *Ramos J L
Departamento de Bioquimica Vegetal, Consejo Superior de Investigaciones
Cientificas, Estacion Experimental del Zaidin, Apto. 419, 18080 Granada,
ΑU
L.O
      Appl.Environ.Microbiol.; (1992) 58, 1, 415-17
SO
      CODEN: AEMIDF
DT
      Journal
      English
LA
L5
      ANSWER 47 OF 60 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN
      1993-14806 BIOTECHDS
ΑN
ΤI
      Expression of recruited biodegradative genes in subsurface bacteria;
              ***Pseudomonas***
                                                ***toluene*** -4-
                                  mendocina
            ***monooxygenase***
                                                               putida
                                                                         ***toluene***
                                   and ***Pseudomonas***
                         ***gene***
          -dioxygenase
                                       expression in river sediment Gram-negative
                          ***toluene***
         bacterium for
                                           degradation (conference abstract)
      Romine M F; Brockman F J
ΑU
      Pacific-Northwest
CS
LO
      Pacific Northwest Laboratory, Richland, WA 99352, USA.
      Abstr.Gen.Meet.Am.Soc.Microbiol.; (1992) 402
50
DT
      Journal
      English
LA
L5
      ANSWER 48 OF 60 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN
      DUPLICATE 17
AN
      1991-13291 BIOTECHDS
      Cloning and characterization of a Pseudomonas mendocina KR1 gene cluster
TI
                 ***toluene*** -4-monooxygenase;
                                     ***toluene***
         potential application in
                                                       degradation and e.g.
         trichloroethylene degradation; DNA sequence
      Yen K M; Karl M R; Blatt L M; Simon M J; Winter R B; Fausset P R
ΑU
CS
LO
      Amgen Inc., Amgen Center, Thousand Oaks, California 91320–1789, USA.
      J.Bacteriol.; (1991) 173, 17, 5315-27
SO
      CODEN: JOBAAY
DT
      Journal
LA
      English
L<sub>5</sub>
     ANSWER 49 OF 60 HCAPLUS COPYRIGHT 2004 ACS on STN
     1991:509282 HCAPLUS
ΑN
     115:109282
DN
     Primary structure of xylene monooxygenase: similarities to and
TI
     differences from the alkane hydroxylation system
ΑU
     Suzuki, Masahiko; Hayakawa, Takahiko; Shaw, Jeffrey P.; Rekik, Monique;
     Harayama, Shigeaki
CS
     Plantech Res. Inst., Yokohama, 227, Japan
     Journal of Bacteriology (1991), 173(5), 1690-5
SO
     CODEN: JOBAAY; ISSN: 0021-9193
DT
     Journal
     English
LA
      ANSWER 50 OF 60 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN
L5
      1991-12572 BIOTECHDS
AN
TI
      Use of a stress-induced promoter to enhance trichloroethylene
      biodegradation in nutrient-limited recombinant E. coli;
              ***Pseudomonas***
                                                ***toluene***
                                   mendocina
                                     ***gene***
           ***monooxygenase***
                                                   expression in Escherichia coli
         under control of the proEL promoter; metabolic engineering (conference
         abstract)
      Little C D; Keyhan M; Fraley C D; McCann M P; Matin A
ΑU
      Stanford University, Stanford, CA 94305, USA.
LO
      Abstr.Gen.Meet.Am.Soc.Microbiol.; (1991) 91 Meet., 294
SO
DT
      Journal
LA
      English
=> d 51-60
     ANSWER 51 OF 60 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
L5
     1991:401668 BIOSIS
AN
DN
     PREV199141063513; BR41:63513
     SELF TRANSFER OF THE PSEUDOMONAS-MENDOCINA KR
                                                        ***TOLUENE***
                                                                          PATHWAY
TI
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AND CLONING OF IT'S P CRESOL REGULON.

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WRIGHT A [Reprint author]; OLSEN R H
ΑU
CS
     UNIV MICH MED SCH, ANN ARBOR, MICH 48109, USA
     Abstracts of the General Meeting of the American Society for Microbiology,
SO
     (1991) Vol. 91, pp. 217.
Meeting Info.: 91ST GENERAL MEETING OF THE AMERICAN SOCIETY FOR
     MICROBIOLOGY, DALLAS, TEXAS, USA, MAY 5-9, 1991. ABSTR GEN MEET AM SOC
     MICROBIOL.
     ISSN: 1060-2011.
     Conference; (Meeting)
DT
FS
     BR
LA
     ENGLISH
     Entered STN: 31 Aug 1991
ED
     Last Updated on STN: 8 Oct 1991
L5
     ANSWER 52 OF 60 SCISEARCH COPYRIGHT 2004 THOMSON ISI ON STN
ΑN
     91:455901 SCISEARCH
GΑ
     The Genuine Article (R) Number: GA438
                        ***GENE***
TI
     SEQUENCE OF THE
                                      (PHEA) ENCODING PHENOL
       ***MONOOXYGENASE***
                                      ***PSEUDOMONAS***
                              FROM
                                                           SP-EST1001 - EXPRESSION
     IN ESCHERICHIA-COLI AND PSEUDOMONAS-PUTIDA
ΑU
     NURK A; KASAK L; KIVISAAR M (Reprint)
CS
     ESTONIAN BIOCTR, PLASMID BIOL LAB, 2 JAKOBI ST, TARTU 202400, ESTONIA,
     USSR
CYA
     USSR
     GENE, (1991) Vol. 102, No. 1, pp. 13-18.
50
DT
     Article; Journal
FS
     LIFE
LA
     ENGLISH
REC
     Reference Count: 23
     *ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS*
L5
      ANSWER 53 OF 60 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN
ΑN
      1991-03054 BIOTECHDS
TI
      The molecular basis of carbon-starvation-induced general resistance in
      Escherichia coli:
         application of starvation gene promoter to recombinant protein
         production, bioremediation, pollutant degradation, large-scale
         fermentation; a review
ΑU
      Matin A
LO
      Department of Microbiology and Immunology, Sherman Fairchild Science
      Building, Rooms D315 and D317, Stanford University, Stanford, California
      94305-5402, USA.
SO
      Mol.Microbiol.; (1991) 5, 1, 3-10
      CODEN: MOMIEE
DT
      Journal
      English
LA
L5
     ANSWER 54 OF 60 LIFESCI
                                  COPYRIGHT 2004 CSA on STN
     91:14828 LIFESCI
AN
                             ***Pseudomonas***
TI
     Plasmid encoding the
                                                                ***toluene***
                                                  mendocina
       ***monooxygenase***
                                ***gene***
     Yen, Kwang-Mu; Blatt, L.M.
     Amgen Inc., Thousand Oaks, CA (USA)
US 5017495 1991
CS
PΙ
     (1991) . US cl. 435/320.1; Int. cl. cl2N 1/00, 9/02, 1/22; cl2P 21/06,
50
     21/04; C12R 1/38..
DT
     Patent
     W
FS
LA
     English
L5
      ANSWER 55 OF 60 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN
      DUPLICATE 18
      DUPLICATE 10
1990-00416 BIOTECHDS
1990-ontaining ***Pseudomonas***
AN
ΤI
                                                 mendocina KR-1
                                                                   ***toluene***
         ***monooxygenase***
                                  ***qenes***
         gene cloning and expression in Pseudomonas putida and Escherichia
         coli; p-cresol, p-hydroxyphenylacetic acid and indigo preparation
      Amgen
PA
      EP 336719 11 Oct 1989
ΡI
      EP 1989-303329 4 Apr 1989
AΤ
      US 1988-177631 5 Apr 1988
PRAI
DT
      Patent
LA
      English
      WPI: 1989-294582 [41]
os
     ANSWER 56 OF 60 HCAPLUS COPYRIGHT 2004 ACS on STN
L5
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1990:404705 HCAPLUS
AN
DN
     113:4705
     Microbial degradation of trichloroethylene in wastewater treatment
TI
     Winter, Robert B.; Yen, Kwang Mu; Ensley, Burt D.
ΪN
PA
     Amgen, Inc., USA
     Eur. Pat. Appl., 23 pp.
S0
     CODEN: EPXXDW
DT
     Patent
     English
LA
FAN.CNT 1
     PATENT NO.
                          KIND
                                 DATE
                                              APPLICATION NO.
                                                                      DATE
PΙ
     EP 336718
                          Α2
                                  19891011
                                              EP 1989-303328
                                                                      19890404
     EP 336718
                           Α3
                                 19910424
         R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE
5079166 A 19920107 US 1988-235354
     US 5079166
                                                                      19881019
     CA 1316860
                           Α1
                                  19930427
                                              CA 1989-595483
                                                                      19890403
     wo 8909827
                           Α1
                                 19891019
                                              WO 1989-US1419
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         W: AU, DK, FI, JP, KR, NO
     AU 8934275
                                  19891103
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     AU 626856
                                 19920813
                           В2
     JP 02503866
                                 19901115
                                              JP 1989-504759
                                                                      19890404
                           T2
     IL 89847
                           Α1
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                                              IL 1989-89847
                                                                      19890404
     KR 131772
                           в1
                                 19980411
                                              KR 1989-702298
                                                                      19890404
     ZA 8902504
                          Α
                                 19891227
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                                                                      19890405
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                                                                      19891204
                                 19960812
     NO 179642
                          В
     NO 179642
                          C
                                 19961120
DK 8906089
PRAI US 1988-177640
                          Α
                                 19900202
                                              DK 1989-6089
                                                                      19891204
                           Α
                                  19880405
     US 1988-235354
                           Α
                                 19881019
     wo 1989-us1419
                                 19890404
                           Α
L5
      ANSWER 57 OF 60 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN
      1989-03786 BIOTECHDS
AN
TI
      Cloning and heterologous expression in Streptomyces lividans of
      Streptomyces rimosus genes involved in oxytetracycline biosynthesis;
         anhydrotetracycline-oxygenase gene cloning in Escherichia coli
ΑU
      Binnie C; Warren M; Butler M J
      Pfizer
CS
      International Process Development Group, Pfizer Limited, Sandwich, Kent
LO
      CT13 9NJ, UK.
      J.Bacteriol.;
                     (1989) 171, 2, 887-95
S0
      CODEN: JOBAAY
DT
      Journal
      English
LA
L5
      ANSWER 58 OF 60 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN
      1989-06075 BIOTECHDS
ΑN
      Efficient degradation of trichloroethylene by a recombinant Escherichia
TI
      coli;
             ***Pseudomonas***
                                               ***toluene***
                                  mendocina
           ***monooxygenase***
                                    ***gene***
                                                  cloning
ΑU
      Winter R B; Yen K M; Ensley B D
CS
LO
      Amgen, 1900 Oak Terrace Lane, Thousand Oaks, CA 91320, USA.
S0
      Bio/Technology; (1989) 7, 3, 282-85
      CODEN: BTCHDA
DT
      Journal
      English
LA
      ANSWER 59 OF 60 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN
L5
      1991-00879 BIOTECHDS
ΑN
      Microbial degradation of environmentally persistent organopollutants;
TI
         military pesticide degradation, solvent degradation, fuel degradation;
         pollutant degradation and bioremediation (conference paper)
ΑU
      Biotechnology Center and Biology Department, Utah State University,
LO
      Logan, UT 84322-4430, USA.
SO
      Biotechnol.Aerospace Appl.; (1989) 59-84
DT
      Journal
      English
LA
L5
      ANSWER 60 OF 60 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN
      1989-08655 BIOTECHDS
ΑN
      Degradation of volatile chlorinated aliphatics by recombinant Escherichia
TI
```

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coli:
         waste-disposal (conference abstract)
      Winter R B; Yen K M; *Ensley B D
ΑU
ςs
LO
      AMGen Inc., Thousand Oaks, California 91320, USA.
      Abstr.Pap.Am.Chem.Soc.; (1989) 197 Meet., MBTD18
SO
      CODEN: ACSRAL
DT
      Journal
      English
LA
=> s yano, ?/au
         50469 YANO, ?/AU
L6
=> s 16 and monooxygenase
            55 L6 AND MONOOXYGENASE
L7
=> dup rem 17
PROCESSING COMPLETED FOR L7
             35 DUP REM L7 (20 DUPLICATES REMOVED)
=> s 18 not 15
L9
            35 L8 NOT L5
=> s 18 and 15
             0 L8 AND L5
=> s 18 and toluene
L11
             4 L8 AND TOLUENE
=> d 1-14
L11 ANSWER 1 OF 4 LIFESCI
                                COPYRIGHT 2004 CSA on STN
     2003:80330 LIFESCI
AN
                             ***toluene***
                                                ***monooxygenase***
     DNA fragment carrying
TI
     recombinant plasmid, transformed microorganism, method for degrading
     chlorinated aliphatic hydrocarbon compounds and aromatic compounds, and
     method for environmental remediation
       ***Yano, T.*** ; Nomoto, T.; Imamura, T.
ΑU
     Canon Kabushiki Kaisha
CS
SO
     (20021029) . US Patent: 6472191; US CLASS: 435/189; 435/252.3; 435/262.5;
     435/320.1; 536/23.2.
DT
     Patent
FS
     W2
LA
     English
     English
SL
      ANSWER 2 OF 4 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN
L11
AN
      2000-10929 BIOTECHDS
                                   ***toluene*** - ***monooxvaenase***
TI
      New polynucleotide encoding
      for generating transformants useful for decontaminating environments
      polluted with e.g. aromatic hydrocarbons;
production of ***toluene*** _- ***monooxygenase***
                                                                   from Ralstonia
         eutropha TB64 FERM BP-6933 useful for degradation
        ***Yano T*** ; Nomoto T; Imamura T
ΑU
PA
      Canon
LO
      Tokyo, Japan.
      EP 1006191 7 Jun 2000
PΙ
      EP 1999-124209 3 Dec 1999
ΑT
      JP 1998-344506 3 Dec 1998
PRAI
DT
      Patent
LA
      English
      WPI: 2000-378265 [33]
05
      ANSWER 3 OF 4 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN
L11
      2000-09780 BIOTECHDS
ΑN
      Novel DNA fragment encoding a
                                      ***toluene*** - ***monooxygenase***
TI
      useful for degrading a chlorinated aliphatic hydrocarbon compound, or an
      aromatic compound, e.g. in environment remediation;
         production of a recombinant DNA using a ***toluene***
           ***monooxygenase*** gene from Burkholderia cepacia strain KK01
        ***Yano T***
                     ; Nomoto T; Imamura T
ΑU
PA
      Canon
      Tokyo, Japan.
LO
PΙ
      EP 999274 10 May 2000
      EP 1999-121681 2 Nov 1999
ΑI
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PRAI
       JP 1998-310801 30 Oct 1998
DT
       Patent
LA
       Japanese
       WPI: 2000-306010 [27]
0.5
L11
      ANSWER 4 OF 4 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
      2003:6580 BIOSIS
ΑN
      PREV200300006580
DN
TI
      DNA FRAGMENT CARRYING
                                  ***TOLUENE***
                                                        ***MONOOXYGENASE***
      RECOMBINANT PLASMID, TRANSFORMED MICROORGANISM, METHOD FOR DEGRADING CHLORINATED ALIPHATIC HYDROCARBON COMPOUNDS AND AROMATIC COMPOUNDS, AND
      METHOD FOR ENVIRONMENTAL REMEDIATION.
      ***Yano, Tetsuya*** [Inventor, Reprint Author]; Nomoto, Tsuyoshi
[Inventor]; Imamura, Takeshi [Inventor]
ΑU
      Atsugi, Japan
CS
      ASSIGNEE: Canon Kabushiki Kaisha, Tokyo, Japan
      US 6472191 October 29, 2002
PΤ
      Official Gazette of the United States Patent and Trademark Office Patents
S0
      (Oct 29 2002) Vol. 1263, No. 5. http://www.uspto.gov/web/menu/patdata.html
      . e-file.
      ISSN: 0098-1133 (ISSN print).
DT
      Patent
      English
LA
      Entered STN: 18 Dec 2002
FD
      Last Updated on STN: 18 Dec 2002
=> dis his
      (FILE 'HOME' ENTERED AT 17:05:24 ON 04 AUG 2004)
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L3
              131 S L2 AND (AROMATIC OR TOLUENE)
L4
L5
               60 DUP REM L4 (71 DUPLICATES REMOVED)
L6
            50469 S YANO, ?/AU
               55 S L6 AND MONOOXYGENASE
L7
               35 DUP REM L7 (20 DUPLICATES REMOVED)
L8
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                4 S L8 AND TOLUENE
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FULL ESTIMATED COST
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SESSION WILL BE HELD FOR 60 MINUTES
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FILE 'WPIDS' ENTERED AT 17:27:40 ON 04 AUG 2004
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COST IN U.S. DOLLARS
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            142 DUP REM L2 (130 DUPLICATES REMOVED)
L3
            131 S L2 AND (AROMATIC OR TOLUENE)
L4
            60 DUP REM L4 (71 DUPLICATES REMOVED)
L_5
          50469 S YANO, ?/AU
L6
             55 S L6 AND MONOOXYGENASE
L7
             35 DUP REM L7 (20 DUPLICATES REMOVED)
L8
             35 S L8 NOT L5
L9
L10
             0 S L8 AND L5
             4 S L8 AND TOLUENE
L11
=> d 111
L11 ANSWER 1 OF 4 LIFESCI COPYRIGHT 2004 CSA on STN
AN
   2003:80330 LIFESCI
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TI
     DNA fragment carrying toluene monooxygenase gene,
     recombinant plasmid, transformed microorganism, method for degrading
     chlorinated aliphatic hydrocarbon compounds and aromatic compounds, and
     method for environmental remediation
ΑU
     Yano, T.; Nomoto, T.; Imamura, T.
     Canon Kabushiki Kaisha
CS
     (20021029) . US Patent: 6472191; US CLASS: 435/189; 435/252.3; 435/262.5;
SO
     435/320.1; 536/23.2.
DT
     Patent
FS
     W2
LΑ
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SL
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=> s 17 and (pseudomonas or bukholderia)
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L13 ANSWER 1 OF 5 HCAPLUS COPYRIGHT 2004 ACS on STN
     2003:863460 HCAPLUS
DN
     139:337026
TT
    Manufacture of unusual polyhydroxyalkanoate (PHA) from aromatic
     ring-containing alkanes with Pseudomonas
ΤN
    Kenmoku, Takashi; Imamura, Takeshi; Honma, Tsutomu; Sugawa, Etsuko;
    Yano, Tetsuya
PΑ
    Canon Inc., Japan
    Jpn. Kokai Tokkyo Koho, 27 pp.
SO
     CODEN: JKXXAF
DT
    Patent
    Japanese
T.A
FAN.CNT 1
                      KIND DATE
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                                         APPLICATION NO.
                       ____
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                                           -----
                               20031105
                                          JP 2002-126158
    JP 2003310292
                        A2
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20031203
20031217
                                                                 20020426
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     EP 1367078
                                         EP 2003-7890
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    US 2003207412
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PRAI JP 2002-126158
                               20020426
                         Α
L13 ANSWER 2 OF 5 WPIDS COPYRIGHT 2004 THOMSON DERWENT on STN
    2004-069293 [07] WPIDS
DNC C2004-028792
    Producing polyhydroxyalkanoate by using microorganisms, involves culturing
    microorganisms in medium containing substituted alkanes.
DC
    A23 D16
    HONMA, T; IMAMURA, T; KENMOKU, T; SUGAWA, E; YANO, T
IN
    (CANO) CANON KK
PΑ
CYC 34
    US 2003207412
PΤ
                    A1 20031106 (200407)*
                                               25
                                                     C12P007-62
                    A2 20031203 (200407) EN
    EP 1367078
                                                     C08G063-00
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      phenyl units;
         polymer production and purification from Pseudomonas
         cichorii and Pseudomonas jessenii
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